



BOROUGH OF WREXHAM

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# ANNUAL REPORT

OF THE

*Medical Officer of Health*

FOR THE YEAR

# 1925

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T. P. EDWARDS,

M.D., B.S. (Lond.) D.P.H. (Camb.).



*Borough of Wrexham.*



*With the*

*Compliments*


*of the*

*Medical Officer of Health.*

*Public Health Officer.*

*1, Grosvenor Road,*

*Wrexham*



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# To the Chairman and Members of the Health Committee.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to present my Annual Report for the year 1925 on the health of the Borough of Wrexham.

Acting on instructions received from the Ministry of Health this Report is what is known as a Survey Report. The purpose of this "Survey" being to give an indication of the present state of Public health in the Borough and to indicate the progress that has taken place during the last five years and incidentally to give some indication as to what improvements can be carried out during the next few years.

In my report for the preceding year I was able to report an increase in the Birth Rate with a decrease in the Infantile Mortality Rate and was able to show that we had definite cause for satisfaction in the health conditions of the Borough. For the year 1925 unfortunately one cannot give a rosy picture. The birth rate has fallen to a marked extent whereas the death rate has risen very slightly and incidentally the Infantile Mortality Rate has increased to a considerable extent (practically double) and the illegitimate Infantile Mortality Rate has also increased.

With regard to the incidence of Infectious Disease there has been an increase in the number of cases notified, the increase being practically solely due to the addition in the number of Scarlet Fever Patients. There was one death from Diphtheria but none from Scarlet Fever or Enteric Fever.

I am extremely fortunate to work with the Staff in the Health Department, every member of which has done his or her work in a satisfactory and efficient manner. Nurse Humphreys still continues to give faithful and valuable service to the Department. As regards Mr. Stephenson his highly efficient work hardly needs any mention. The work that he does reaches a high standard and the results are shown in a striking manner in the improved hygienic conditions of the Borough. It is hardly necessary for me to refer once again to the work of Miss Cotton who continues to perform her duties conscientiously and most efficiently.

I desire once again to express our appreciation of the invaluable support, sympathy and advice which we as a Health Department have received from the Chairman of the Health Committee, Dr. S. Edwards-Jones, and also from the Town Clerk, Mr. Lawson Taylor and his Assistants together with the other Officials of the Corporation.

I am, Mr. Chairman and Gentlemen,

Your obedient Servant,

T. P. EDWARDS,

*Medical Officer of Health.*

## Staff of the Health Department.

*Medical Officer of Health, Medical Officer for Maternity and Child Welfare,  
Medical Superintendent of the Fever Hospital.*

T. P. EDWARDS, M.D., B.S. (LOND.) D.P.H. (CANTAB.)

*Sanitary and Housing Inspector and Superintendent of Abattoir.*

I. A. STEPHENSON, M.S.I.A., C.M.I.

*Health Visitor :* Miss E. HUMPHREYS.

*Clerk to the Borough Health Department :* Miss I. COTTON.

*Matron of the Fever Hospital :* Miss M. BUSHNELL.

## Health Committee.

*Chairman :*

DR. S. EDWARDS JONES.

The Health Committee is constituted of the whole Council.

## Maternity and Child Welfare Sub-Committee.

*Chairman :* Dr. S. EDWARDS JONES.

*Vice-Chairman :* CYRIL O. JONES, Esq.

*Members :*

LADY ROWLAND, O.B.E.

Mrs. ROGERS.

Mrs. S. EDWARDS JONES (Resigned Dec., 1925).

Mrs. ROBERTS.

Mrs. GRIFFITHS.

Mrs. ASTON.

*Town Clerk :* MR. LAWSON TAYLOR.

*Engineer and Surveyor :* JOHN ENGLAND, C.E.





## Natural and Social Conditions of the Area.

The Borough of Wrexham comprises an area of 1,305 acres with a population estimated (as a death rate population) at 19,260. The Borough itself is situated on the Banks of the river Gwenfro upon soil which is mostly drift composed of gravel and is surrounded on all sides by the Wrexham Rural District. The Borough itself plays a very important part in the commercial and industrial life of not only this area but of North Wales. The Smithfield which is open on a Monday attracts a large number of persons connected with the agricultural industries as well as the meat traders. For many years the Borough has been noted for its Horse Fairs which have attracted buyers from all parts of the Country. The commercial life of the town is important in that it has to deal with a population of nearly 100,000 people, the majority of whom are connected with the coal mining and steel industries in the Rural Area. The recent increased facilities of transport have also had their effect on the commercial life of the Borough. Though Wrexham is a well known residential and shopping centre one has to remember the existence of many important industries within the Borough including well known representatives of the Licensing Trade, Milling industries and Leather Works.

In addition to the chief industries mentioned one must also refer to the fact that Wrexham forms a very important railway centre and that the railway workers in the Borough reach a rate of 51 per thousand males of 12 years and upwards which is the highest in the County of Denbigh.

Though Wrexham is such an important centre for trade and commerce one must keep in mind its proximity to the health giving mountains of North Wales and the beautiful scenery of the valleys, such as Llangollen and the Ceiriog Valley. As will be mentioned later on in the Report the drainage system of the Borough is based on modern principles and it is satisfactory to note that with the exception of one privy midden all the buildings are connected to the Sewers. The population as estimated by the Registrar-General for 1925 is 19,260 which compares with the estimated population for 1921, 19,210 but the census figures for 1921 give a population of 18,703, so that it would appear that there has been no marked increase in the population of Wrexham during the last five years. When one looks at the Census figures for the last 20 years one finds that there was a substantial increase from 14,966 in 1901 to 18,377 in 1911 and it would appear that the population since 1911, though there has been a slight increase, is on the whole stationary. As to any future prospects of an increase in population within the Borough, one has at the present to rely on an extension of the erection of houses within the Borough and though the Borough Council have erected a large number of houses there has not been a similar progressive policy by means of private enterprise. There are however indications in the near future of the possibility of additional houses being built by private enterprise in the South Ward but if one takes this out of consideration there would appear to be a very small amount of land available for building purposes within the Borough so long as the Borough keeps within its present Boundaries. Present indications point to the fact that a development of the Area is taking place to the North outside the Boundaries of the Borough.

In addition to what has already been stated additional information is supplied based on the Census figures of 1921 in regard to the statistical conditions in Wrexham. In the first place the Wrexham Borough joins with Denbigh in being an urban area with the largest proportion of structural and divided private houses, namely 94 per cent., and that flats are non-existent. Another matter for interest is the average size of families in Wrexham, namely 4.36 persons, a figure which is only beaten in the County of Denbigh by Chirk and Wrexham Rural Districts.

It is necessary to refer to one influence which undoubtedly has a marked effect on the health of the people namely the influence of overcrowding. There is evidence that the overcrowding in some parts of the town is urgent and acute, much of this is partly due to the number of miners who work outside the area and this necessitates that these persons have to perform long journeys to and from their occupation which is done in some cases by means of vehicles and in other cases by walking which involves in some cases a walk of two or three miles. We have received ample evidence of the amount of overcrowding in the Reports of the Health Visitor during her visits to mothers before and after confinement and one of the chief influences of overcrowding is the fact that so many mothers have to be confined in lodgings or in houses which are already fully occupied by other persons.

This state of overcrowding is especially acute in the region of the Beastmarket which adjoins the Smithfield and is in some degree present in every part of the Borough. Discussions have taken place in the past in reference to the erection of a suitable Maternity Hospital for the Borough but up to the present the matter is in abeyance. At the present moment the only alternative to confinement in these overcrowded houses is admission to the Workhouse Infirmary, which is by no means an ideal solution of the problem, especially so when there is much objection, rightly or wrongly, to admission to a Poor Law Institution for this purpose.

## General Statistics.

At the present moment for administrative purposes the Borough is divided into four Wards, North, South, East and West. According to the Census figures of 1921 the East Ward has an acreage of 599 with a population of 5,643, giving an average, according to census figures of 9.1 persons per acre. In this Ward the number of rooms per person was 0.99. The North Ward has 123 acres and contains 2,728 persons with an average density of 22.2 persons per acre and there are 1.2 rooms per person. The South ward consists of 490 acres and 5,433 persons, a density of 11.1 persons per acre and 1.27 rooms per person. Lastly the West Ward with 133 acres contains 4,900 persons with an average density of 36.9 persons per acre and 1.17 rooms per person. It would appear from these figures that the least density exists in the East Ward but one must take into consideration the fact that there is a large amount of undeveloped land which will probably never be developed and this naturally lessens the density figures and gives one a totally wrong impression and one can safely say that the density of population in some parts of the East Ward is very much in excess of the high figures quoted for the West Ward. At the present moment a petition has been sent to London praying that a re-arrangement of Wards takes place in order that the Wards for Council purposes should be identical with those for parliamentary purposes and it is asked that the town be sub-divided into seven wards.

Area (acres)	...	...	...	...	...	...	...	...	1,305
Population (1925) (Estimated)	(Death Rate Population)	...	...	...	...	...	...	...	19,260
	(Birth Rate Population)	...	...	...	...	...	...	...	19,510
Number of Inhabited Houses, 1925	...	...	...	...	...	...	...	...	4,173
" " " " 1921 (Census)	...	...	...	...	...	...	...	...	3,852
Number of Families or Separate Occupiers, 1921	...	...	...	...	...	...	...	...	4,097
Rateable Value	...	...	...	...	...	...	...	£86569	16s. 9d.
Sum represented by a Penny Rate	...	...	...	...	...	...	...	£332	13s. 1d.

The amount of out-relief given for the year ending 31st March, 1926, in the Borough of Wrexham is £4475/2/11. The Hospital under the Poor Law, together with other forms of gratuitous Medical Relief are utilised to the fullest extent as is necessitated by the circumstances of ill-health prevailing amongst persons eligible for these benefits.

## Extracts from Vital Statistics of the Year.

Births	Legitimate	...	...	Total.	...	M.	...	F.	Birth Rate (R.G.) 18.60 (England & Wales 18.3)
				353	...	187	...	166	
	Illegitimate	...	...	10	...	6	...	4	
	Total	...	...	363	...	193	...	170	
<hr/>									
Deaths	...	...	...	263	...	126	...	137	Death Rate (R.G.) 13.65 (England & Wales 12.2).



Number of women dying in or in consequence of childbirth :—

1	From Sepsis	...	...	Nil
2	From other causes	...	...	Nil

Deaths of Infants under one year of age per 1,000 births :—

		Males.		Females.		Total.
Legitimate	...	24	...	16	...	40
Illegitimate	...	1	...	1	...	2
Total	...	25	...	17	...	42
<hr/>						
Infantile Mortality Rate,		Legitimate	...	...	...	113.3
		Illegitimate	...	...	...	200.00
		Total	...	...	...	115.7 (England & Wales 75).
<hr/>						
Death from Measles (all ages)		...	...	...	...	Nil
Deaths from Whooping Cough (all ages)		...	...	...	...	1
Deaths from Diarrhoea (under 2 years of age)		...	...	...	...	5

It appears from the above statistics that the number of births, legitimate and illegitimate, during the year 1925 has fallen to a considerable extent, this having a marked effect in the lowered birth rate, but even though the birth rate has decreased it is above the figure given by the Registrar General for the whole of England and Wales, namely 18.3, which is a decrease of .5 on the figures of the previous year. As regards the Infantile Mortality Rate this has increased to a considerable extent and the figures 115.7 compare very unfavourably with the figure for England and Wales as a whole, namely 75, which is still the same, and also compare very unfavourably with that of the previous year, namely 65.57. The cause of the increase in the Infantile Mortality Rate can be put down to the marked increase in the number of deaths of legitimate infants, the number having risen from 26 in 1924 to 42 for 1925. It is of interest to note however that a large number of deaths took place in the last two or three weeks of the year. A substantial proportion of the increase for the whole of the year is due to the increase in the number of deaths from congenital debility and premature birth. It is of interest to note also that the illegitimate Infantile Mortality Rate has risen from 117.6 to 200, the nett number of deaths was identical with last year and one can place the increase in the Infantile Death Rate to the diminution in illegitimate births during the year and this only illustrates in a marked degree one of the fallacies of statistics due to the use of small numbers as must necessarily be the case in a Borough such as ours.

## DEATHS.

During the year there were 259 deaths registered as having occurred in the Borough. From this number 47 in respect of persons, who, though dying in the Borough, were non-residents, must be deducted and 51 added in respect of that number of Borough residents who died in Institutions, etc., outside. This makes the actual number of Borough deaths up to 263.

## DEATH-RATE

Taking the figure 263 as representing the actual number of deaths occurring in the Borough it gives a death-rate of 13.65 per 1,000 of the estimated population—compared with 12.2 for England and Wales and 13.09 for Wrexham Borough for the year 1924.

The death-rate for the previous years was as follows :—

1901	...	19.21	1913	...	13.44
1902	...	17.36	1914	...	13.73
1903	...	16.94	1915	...	14.8
1904	...	20.76	1916	...	13.93
1905	...	15.93	1917	...	15.82
1906	...	17.69	1918	...	15.65
1907	...	14.48	1919	...	15.86
1908	...	15.81	1920	...	12.7
1909	...	15.25	1921	...	12.2
1910	...	13.85	1922	...	13.1
1911	...	15.58	1923	...	12.9
1912	...	14.35	1924	...	13.09

The following Table gives the causes of death.

CAUSES.				0-1	1-2	2-5	5-10	10-15	15-25	25-35	35-45	45-65	65	Males.	Females.	Total
1	Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Whooping Cough	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
6	Diphtheria	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
7	Influenza	...	...	...	...	...	...	...	1	1	...	...	...	1	1	2
8	Encephalitis Lethargica	...	...	...	...	...	...	...	1	1	...	1	...	1	2	3
9	Meningococcal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Tuberculosis of respiratory system	...	...	1	...	...	1	1	6	7	4	6	...	11	15	26
11	Other Tuberculosis diseases	...	...	...	...	1	...	...	...	...	1	...	...	1	1	2
12	Cancer, malignant disease	...	...	...	...	...	...	...	...	...	2	10	14	9	17	26
13	Rheumatic Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	Diabetes	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
15	Cerebral haemorrhage, etc.	...	...	...	...	...	...	...	...	1	1	5	8	6	9	15
16	Heart Disease	...	...	...	...	...	...	...	...	1	4	17	25	19	28	47
17	Arterio-sclerosis	...	...	...	...	...	...	...	...	...	...	1	11	8	4	12
18	Bronchitis	...	...	...	5	...	1	...	...	...	...	5	13	8	16	24
19	Pneumonia (all forms)	...	...	7	3	2	1	...	...	...	5	3	1	12	10	22
20	Other respiratory diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	Ulcer of stomach or duodenum	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
22	Diarrhoea, etc. (under 2 years)	...	...	5	...	...	...	...	...	...	...	...	...	3	2	5
23	Appendicitis and Typhilitis	...	...	...	...	...	1	...	2	1	...	...	...	3	1	4
24	Cirrhosis of Liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	Acute and chronic Nephritis	...	...	...	...	1	...	...	...	...	...	3	2	3	3	6
26	Puerperal Sepsis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	Other accidents and diseases of pregnancy and parturition	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Congenital debility and malformation, premature birth	...	...	17	...	...	...	...	...	...	...	...	...	13	4	17
29	Suicide	...	...	...	...	...	...	...	...	1	...	...	1	2	...	2
30	Other deaths from violence	...	...	...	...	...	...	1	...	2	1	2	...	6	...	6
31	Other defined diseases	...	...	6	3	2	...	...	...	...	1	8	20	18	22	40
32	Causes ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All causes.		Totals	...	42	6	8	3	2	10	15	19	62	96	126	137	263

In comparing the causes of deaths for 1925 with those of 1924 it will be noticed that the total number of deaths has increased by 11, six of these being males and 5 being females. The first cause for satisfaction is the marked decrease in the number of deaths from Influenza, affecting both sexes, but this is to a certain extent, compensated by an increase in the deaths from Encephalitis. There has been a slight decrease in the deaths from Tuberculosis of the respiratory system as well as other Tuberculosis diseases, but it is of interest to note that the decrease in deaths is due to the very marked decrease in the deaths of males but this marked decrease is nearly compensated by a very substantial increase in the deaths of females. The question of deaths from cancer comes home to us all. This dread disease has been on the increase for a good many years and the cases in the Borough of Wrexham of deaths from this disease has increased from 16 to 27. It will be noted that there has been an increase of three amongst males and the increase in females amounts to 7. In the deaths from Cerebral Haemorrhage there has been a slight decrease in male deaths with a very substantial decrease in female deaths which gives a total figure very much lower than that for the previous year. The deaths from Heart Diseases have increased, the increase affecting very markedly the female sex, whereas the increase in the deaths from Arterio-sclerosis affects males. There has been an increase in the deaths from Bronchitis but this increase affects the females and more

than compensates for a slight decrease amongst the males. The figures for Pneumonia remain practically stationary, but whereas there has been a slight decrease amongst males there has been a slight increase amongst females. In reference to my statements on the Infantile Mortality Rate it will be noted that there has been an increase in the deaths from Diarrhoea. According to the Registrar-General's figures these are deaths under two years and it is a reasonable supposition, that the majority, if not all of these took place under one year and would thus be included in the Infantile Mortality Rate. There have been no deaths from Cirrhosis of the Liver and fewer deaths from Nephritis. There has also been an absence of deaths from Puerperal Sepsis and from other accidents and diseases of pregnancy and parturition but one has to report a marked increase in the number of deaths from Congenital Debility, malformation and premature birth, this increase being due solely to the marked increase amongst the male deaths and this more than compensates for the decrease in the female deaths.

#### Notifiable Diseases.

##### 3. Notifiable Diseases during the year.

DISEASES.	Total cases Notified.	Cases admitted to Hospital.	Total Deaths.
Small Pox ... ..	—	—	—
Diphtheria ... ..	20	20	1
Scarlet Fever ... ..	35	29	—
Enteric Fever (including Paratyphoid) ... ..	2	1	—
Puerperal Fever ... ..	—	—	—
Pneumonia ... ..	13	—	4
<i>(Other diseases specially notifiable).</i>			
Erysipelas ... ..	3	—	—
Encephalitis Lethargica ... ..	1	—	3
Poliomyelitis ... ..	1	—	—

It will be noted that the number of notifiable diseases has increased as well as the number of admissions to the Isolation Hospital. The increase in the notifications is due to the increase in the incidence of Scarlet Fever and the increase in the admissions to Hospital is again due to the very marked increase in Scarlet Fever from 8 in 1924 to 29 in 1925.

##### 4. Tuberculosis cases notified during the year. Arranged according to ages.

AGE PERIODS.	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary		Pulmonary.		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1 ... ..	—	—	—	—	—	—	—	—
1—5 ... ..	—	1	1	—	—	1	—	—
5—10 ... ..	—	1	1	1	1	1	—	—
10—15 ... ..	—	3	2	1	1	—	—	—
15—20 ... ..	3	3	—	1	—	3	—	—
20—25 ... ..	1	3	—	—	—	2	—	—
25—35 ... ..	7	4	—	1	3	2	—	—
35—45 ... ..	5	—	1	—	2	1	—	—
45—55 ... ..	4	1	1	—	2	—	—	—
55—65 ... ..	1	1	—	—	1	—	—	—
65 and upwards ... ..	—	—	—	—	—	—	—	—
Totals	21	17	6	4	10	10	—	—



In studying the above Table it will be seen that there has been an increase in the number of notifications of Tuberculosis. The increase is marked amongst females, especially so in adolescent and adult life from 20 to 55. There is a slight increase in the number of deaths in cases which have been notified, whereas on the one hand there has been a decrease in the male deaths there has been an increase in the female deaths and this increase in the female deaths was in respect of females between the ages of 15 and 25 years. There have been six deaths from Tuberculosis which were not notified, one of these being a male and five being females and in addition to this, one male and one female died unnotified, from other Tuberculosis diseases.

**5. Table showing cases of Ophthalmia Neonatorum notified.**

OPHTHALMIA NEONATORUM.	CASES.			Vision Unim- paired.	Vision Impaired	Total Blindness	Deaths.
	Notified	Treated.					
		At Home	In Hospital				
	1	1	—	1	—	—	Nil.

#### **Diphtheria.**

The figures show a slight decrease in the number of cases notified, 20 instead of 22. All of these cases were admitted to Hospital and there was one fatal termination. The case rate per thousand of the population in the town is 1.0 compared with 1.1 for the previous year.

The Ward distribution was as follows :—

N.	S.	E.	W.	Total.
1	2	13	4	20

Arrangements are in force whereby all swabs of suspected cases and also of contacts are examined at the Fever Hospital from which Institution a supply of Antitoxin is available to any Practitioner in the area on request. For a town with a population of Wrexham one cannot say that there has been an excessive number of cases during the year. As regards the seasonal incidence of cases there appears to have been more cases during May and July together with a relative absence of cases during the last quarter. Of the 20 cases of Diphtheria 9 occurred in adults, but three of these occurred in the same house and were due to the lack of early visit on the part of one of the patients to her medical adviser. The 3 cases were 3 sisters sleeping in the same bedroom, 3 of them being employed in two different millinery establishments and no doubt had the first case obtained medical advice at an early date the other 2 cases would have been avoided. Owing to the relatively few positive cases the question of performing the newer tests for diagnosis, such as the Schick Tests, has not been considered necessary nor has it been necessary to make use of the modern methods of artificial immunization.

#### **Scarlet Fever.**

During the year the number of cases notified showed a substantial increase on the figure of the previous year. The increase being nearly 100 per cent. and the actual figures were 35 as compared with 18. Of the 35 cases 29 were admitted to Hospital which is a very more satisfactory proportion than was the case in 1924 when only 8 out of 18 cases were admitted to Hospital. In no case did a fatal termination occur and the cases were all of a practically mild degree. Of these cases 14 occurred in the first three months of the year and a large proportion of these occurred in Beechley Road. In respect to these cases it is of interest to note that all the houses received their milk from the same retailer but one cannot put down the cause of the mild epidemic as being due to the milk supply seeing that other premises in the immediate neighbourhood which receive milk from the same source were entirely free from the disease so that it would appear that actual contact from case to case, directly or indirectly, was of more influence than any specific agent

such as the milk retailer. During the last 4 months of the year a slight recrudescence of the disease occurred affecting all parts of the town. Under this disease again one has to report that no use has been made of the modern methods of diagnosis by means of the Dick Tests and one cannot say that the evidence of artificial immunization by means of the appropriate serum has yet been proved to have been established on a definite basis for practical use.

### **Pneumonia.**

13 cases of Pneumonia were notified resulting in 4 deaths. It will be seen that the number of notifications has diminished in comparison with the previous year. There were 22 deaths from all forms of Pneumonia during the year so that it would appear that 18 cases were either unnotified or were secondary in character.

### **Tuberculosis.**

48 cases of Tuberculosis were notified during the year as compared with 38 cases in 1924 and 22 cases in 1923. It would thus appear that there is a progressive increase in the number of cases notified during the last year or two and undoubtedly this is due to the more efficient notification by the General Practitioner than was the case in years gone by. Consequently one cannot put down the increase in the number of cases notified to the actual increase in the number of cases occurring. Of these 48 cases 27 were males, 21 females and 38 were pulmonary cases, the remaining 10 being non-pulmonary. On reference to the Registrar General's Table of all Causes of Death it will be noticed that there are 26 deaths from Respiratory Tuberculosis but only 20 of these had been notified so that 6 cases died unnotified or notification had not been made formally antemortem. Of the non-pulmonary cases 2 deaths which occurred were in reference to cases which had not been notified, thus bringing up the total number of deaths which were formally un-notified to 8. This compares favourably with the position in 1924, when 9 deaths took place un-notified. No action has been taken in relation to the Public Health (Prevention of Tuberculosis) Regulations 1925 nor was any action considered necessary under section 62 of the Public Health Act, 1925. Certain discussions have taken place lately in relation to section 62 amongst other questions by the County Health Committee in conjunction with representatives of Local Authorities in the County. Certain proposals have been drafted and will be submitted to each Authority for discussion. The main object of these proposals is to avoid overlapping in Public Health administration and it is proposed that effective action be undertaken through the County Medical Officer of Health who will be advised by the District Medical Officers of Health as to any suitable cases existing in their area.

It is unnecessary for me to state that the relations between the Health Department and the Welsh National Memorial Association continue to be most cordial.

The Ward distribution of cases was :—

N.	S.	E.	W.	Total.
7	23	12	6	48

This shows that the incidence of Tuberculosis has increased, but especially so in the North and South Wards.

### **Anthrax and Rabies.**

There have been no cases of locally contracted anthrax in spite of an important skin industry in Wrexham nor has there been a case of Rabies.

### **Small Pox.**

No case of this disease occurred in the Borough nor was there any suspected case. It is pleasing to note that arrangements have been made by the County Council for the erection of a Small Pox Hospital in a convenient position.

These figures have been kindly supplied by the Clerk to the Wrexham Board of Guardians and include the Rural District.



	1919	1920	1921	1922	1923	1924
Total Births ... ..	1785	2232	1925	1795	1781	1837
Successfully vaccinated ... ..	614	710	645	529	666	681
Insusceptible ... ..	—	2	1	—	1	3
Conscientious Objections ... ..	(54%) 974	(58%) 1295	(60%) 1164	(61%) 1101	(50.8%) 905	(49.8%) 916
Died unvaccinated ... ..	135	136	120	100	101	113
Postponed by Medical Certificate ...	34	31	46	27	42	58
Removed ... ..	7	48	45	38	61	62
Unaccounted for ... ..	9	10	3	—	15	4

### Enteric Fever.

There were two notifications of Enteric Fever during the year, one being admitted to the Fever Hospital.

### Cancer.

The information available under this heading consists solely of enumeration of deaths that have taken place during the year and it will be noticed that the number of cases has increased. It will naturally be impossible to obtain data of any value until notification of Cancer is brought into force. The recent work of Gye and Barnard and the work done in Liverpool has given us some hope that the problems concerning causation of this disease will be enlightened and that we shall be able to proceed on definite scientific lines in the diagnosis and treatment. In the recent discussions in reference to the treatment by lead salts as a curative agent in Cancer it was stated that no case of persons engaged in industries connected with lead suffered from Cancer but it is interesting to note that one person in Wrexham, a painter by occupation, died during the year from this disease.

### Verminous Persons.

It has not been necessary to cleanse any verminous person during the year but arrangements are in force whereby disinfection of clothes and cleansing of persons can be obtained and action is frequently taken in respect to verminous premises which are thoroughly disinfected by a competent official.

### 6. Notifiable Infectious Diseases during the year. Arranged according to age.

DISEASES.	Under 1 yr.	1—2	2—3	3—4	4—5	5—10	10—15	15—20	20—35	35—45	45—65	65 and over.	Total.
Small Pox ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria ... ..	—	—	2	2	—	4	3	3	6	—	—	—	20
Scarlet Fever ... ..	—	—	2	2	4	11	7	5	1	1	2	—	35
Enteric Fever ... ..	—	—	—	—	—	—	1	1	—	—	—	—	2
Puerperal Fever ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia ... ..	—	1	3	1	—	2	—	—	1	2	3	—	13
Erysipelas ... ..	—	—	—	—	—	—	1	—	1	—	1	—	3
Encephalitis Lethargica ... ..	—	—	—	—	—	—	—	—	—	—	1	—	1
Poliomyelitis ... ..	—	—	—	—	1	—	—	—	—	—	—	—	1
Totals ... ..	—	1	7	5	5	17	12	9	9	3	7	—	75

## Summary of Nursing Arrangements.

### Hospital and other Institutions available for the District.

#### Professional Nursing.

(a) GENERAL. There are two Voluntary Nursing Associations in the Borough providing nurses whose duties are purely the nursing of the sick. Those Institutions are the Parish Nurse Charity and the Wrexham District Nursing Association, the latter employing two Nurses.

A small subsidy is granted to both bodies by the Board of Guardians annually.

(b) INFECTIOUS DISEASES. There are no arrangements, either voluntary or official for the nursing of cases of Infectious Diseases in the home.

#### Midwives.

There are nine Midwives practising in the Borough. They are under the control of the County Council.

## Clinics and Treatment Centres.

### Maternity and Child Welfare.

The premises used for the Maternity and Child Welfare Centre are at No. 1 Grosvenor Road, assisted by the Voluntary Ladies' Committee of the Civic Guild of Help. Consists of weighing room, waiting room and consulting room.

Infant Welfare Clinics on Mondays each week. Mothers' Sewing Class on Thursday each week.

### School Clinic.

Treatment provided for minor ailments, skin diseases, tonsils and adenoids, dental defects and defective vision, X-ray treatment of ringworm is provided by arrangement with the Board of Guardians in suitable cases. Open Daily 9 a.m. to 5 p.m.

### Tuberculosis.

Consultation Clinic for Wrexham and District at Temple Row, in the Denbighshire and Flintshire area of the Welsh National Memorial Association. Staffed by Tuberculosis Officer and an Assistant Tuberculosis Officer. Open for consultation on Mondays and Thursdays of each week.

### Venereal Diseases.

Under control of County Council. Clinic provided for Wrexham cases at Chester Infirmary.

### Hospital Accommodation.

GENERAL (a) Wrexham Infirmary, 56 beds. Under Voluntary Committee.

(b) Croesnewydd Hospital, 120 beds. Under Board of Guardians.

TUBERCULOSIS. Beds available for Wrexham cases in the Sanatoria of the Welsh National Memorial Hospital at Talgarth Sanatorium (men) Llangwyfan Sanatorium (women and children) and at Meadowslea Hospital, Penyffordd.

FEVER. Wrexham Fever Hospital. Property of the Wrexham Rural District Council. Administered by Joint Committee with representatives of the Wrexham R.D.C., Wrexham Borough, Llangollen R.D.C., Llangollen U.D.C., Ruthln U.D.C. and R.D.C., Overton R.D.C., and Uwchaed R.D.C., for all of which authorities beds are allotted.

There are no special hospitals for Maternity cases, children or small pox. All are required.

The Small Pox Hospital as previously mentioned is under consideration.

**Institutions.**

Accommodation for convalescent or debilitated persons is provided for residents in Wrexham and District in the John Jones' Memorial Homes at Rhyl for adults and at Minera for children.

The Board of Guardians have institutions for homeless children at Little Acton and in Benjamin Road.

There are also St. Giles' Home for Waifs and Strays (Church of England) for boys under 12 years of age ; and Home for Friendless Girls, Manley Road.

**Fever Hospital Statement for 1925.**

	Scarlet Fever.	Diphtheria.	Enteric Fever.	Total.
Remaining in Hospital December, 1925	6	1	—	7
Admitted during the year 1925	29	20	2	51
Discharged during the year 1925	31	19	2	52
Remaining in Hospital December, 1925	4	1	—	5
Deaths in Hospital during the year	—	1	—	1

**Ambulance Facilities.**

- (a) INFECTIOUS CASES. Motor Ambulance attached to the Wrexham Fever Hospital.  
 (b) NON-INFECTIOUS AND ACCIDENT CASES. Motor Ambulance attached to the Wrexham General Infirmary.

**Public Health Officers of the Local Authority.**

(1) The Medical Officer of Health also undertakes duties of School Medical Officer for the Borough and Medical Officer to the Child Welfare Centre in addition to these appointments he is Certifying Officer under the Mental Deficiency Act for the School Medical Service, Medical Officer of Health to the Wrexham Rural District Council and Medical Superintendent of the Wrexham Joint Fever Hospital Committee. As respects all these appointments the Medical Officer of Health is a full time official but is for each Authority a part-time Official.

(2) Dr. Katharine Drinkwater acts as Assistant School Medical Officer to the Borough.

(3) There is one Sanitary Inspector, Mr. Ivor A. Stephenson, who is a certified Meat Inspector.

(4) The Health Visitor, Miss Ethel Humphreys, possesses the Health Visitor's Certificate of the Royal Sanitary Institute and has held the appointment of School Nurse to this Authority. Her duties as Health Visitor occupy the whole of her time.

(5) Mr. Ross Wallis acts as Dentist to the School Medical Service and his appointment is a part time appointment.

(6) Miss Irene Cotton, Clerk to the Medical Officer, is also Clerk to the School Medical Service. Her duties make up a whole time appointment.

**Chemical Work.**

Arrangements are made for chemical work to be done by the Clinical Research Association, London. The only chemical work done during the year has been in relation to the analysis of water supplies and a copy of the Analyst's reports are included under the heading of water supplies.

**Maternity and Child Welfare Work.**

	1920	1921	1922	1923	1924	1925
No. of Mothers with babies attending the Maternity Centre	370	384	416	486	383	639
Total attendance of Mothers with babies	1670	2282	2814	4000	3677	4581
Average weekly attendances	35	47	59	84	75	93
No. of Medical consultations	396	454	549	294	256	243

It is pleasing to note the progress that has taken place during the last five years under this branch of public health work and undoubtedly the Child Welfare Department is becoming an Insti-



tution which is valued by the Mothers and plays an important part in the economic life of the Community. Certain statistics are valuable in showing the progress which has taken place. The number of mothers attending with babies in 1917 was 103 whereas in 1920 this number had risen to 370. During the last five years, with one exception in 1924, these numbers have increased progressively until for last year, namely 1925, the number of babies attending was 639. Similar progress has taken place in respect to the total attendances of Mothers with babies which amounted in 1917 to 243 but with the exception of 1924 the numbers have increased progressively until the figure for 1925 amounts to 4,581 which shows that since 1917 the total attendances have increased twenty-fold. Similar interesting information is obtained in comparing the average weekly attendances which in 1917 amounted to 5 and in 1920 to 35 with a progressive increase (with the exception of a slight decrease in 1924) until in 1925 the figure amounted to 93. Previous to 1923 the work of the Centre was carried out in totally inadequate premises in Chester Street and it is interesting to refer to and repeat what my predecessor, Dr. Lumb, stated in his Annual Report for 1922, namely:—"When it is to be remembered that the Child Welfare Centre should have a large waiting room, weighing room, consultation room, and accommodation for perambulators it is evident that an attendance of anything up to 100 mothers with their children requires the provision of very roomy premises." In 1923 the work was transferred to very commodious premises with a large weighing room, suitable waiting room, which is also used for the provision of teas and also with an adequate consulting room together with ample accommodation for prams. The work of the Centre at the present premises at 1 Grosvenor Road has increased and an indication of this is seen when during 1925 the maximum number of Mothers with babies attending reached the record figure of 134. It is an undoubted fact that the attendances are affected by the weather which was shown on the Chart included in my Annual Report for 1923 and another influence which undoubtedly causes a progressive increase in the number of Mothers attending during the last three months of the year is the proximity of the Christmas Treat given annually at the Victoria Hall. The work of the Centre has been rendered invaluable aid by the presence of voluntary workers who are most regular in their attendances and whose assistance is very much appreciated not only by myself and the Health Visitor but by the Health Committee and the general public. Valuable assistance is also given by the Child Welfare Committee in providing ladies to undertake the duties of making tea.

When we removed to No. 1 Grosvenor Road the premises were thought to be more than ample but undoubtedly when we have large attendances the accommodation is taxed to its utmost. Though I do not see any marked prospect of any substantial increase in the number of babies attending the Centre it will be necessary in the event of any substantial increase taking place to consider the question of sub-Centres in the different wards as has been undertaken in certain Boroughs which are similar in size and population to ours. At the present moment there is no indication that such a provision is necessary.

The increase in the work is shown by the increase in the provision of dried and fresh milk to necessitous cases and this is an indication of the economic circumstances through which the community has passed during the last few years. Though the amount of free milk has increased, every care is taken that such an increase is necessary, and each application for milk is examined by the Chairman of the Health Committee and is visited by the lady members of the Milk Sub-Committee who report monthly to the appropriate Sub-Committee.

The total number of cases in which milk has been supplied free of charge was:—

	Cases.	Amount
Dried Milk ... ..	184	£81 4 10
Fresh Milk ... ..	195	£41 1 6
The total cost was ... ..		£123 6 4

The same system of distribution of dried milk is in force as for the year 1924 the present arrangement being that all dried milk is supplied through the Chemists at specially reduced rates, this arrangement has effected a lightening of the Clerical work, whereas fresh milk is obtained from one Retailer whose herds are of the highest standard and provide most excellent milk.

The question of the provision of a Maternity Hospital or Home has engaged the attention of the Health Committee on several occasions. It is recognised that the Borough is too small to undertake the building, equipment and management of such an institution but it is hoped that with the assistance and co-operation of the County, adequate provision will be made in the near future.

**Number of Babies registered with Medical Officer of Health.**

No. of Babies notified to M.O.H.	...	...	...	...	...	...	...	...	381
Males	...	...	...	...	...	...	...	...	207
Females	...	...	...	...	...	...	...	...	174
No. of Illegitimate babies	...	...	...	...	...	...	...	...	5
No. of Stillbirths	...	...	...	...	...	...	...	...	21
No. dying within a few hours	...	...	...	...	...	...	...	...	10
No. of deaths under 12 months	...	...	...	...	...	...	...	...	42
Infantile Mortality Rate	...	...	...	...	...	...	...	...	115.7

**Health Visitor's Work at Homes and Centres.**

No. of Breast fed babies during 1st visit	...	...	...	...	...	...	...	...	337
No. of Bottle Fed babies during 1st visit	...	...	...	...	...	...	...	...	38
No. of Twins	...	...	...	...	...	...	...	...	11

**Condition of Child.**

Good	...	...	...	...	...	...	...	...	333
Bad	...	...	...	...	...	...	...	...	1
Indifferent	...	...	...	...	...	...	...	...	19

**Condition of Mother.**

Good	...	...	...	...	...	...	...	...	352
Bad	...	...	...	...	...	...	...	...	—
Indifferent	...	...	...	...	...	...	...	...	9

**Cleanliness of Homes.**

Clean	...	...	...	...	...	...	...	...	325
Fairly Clean	...	...	...	...	...	...	...	...	30
Dirty	...	...	...	...	...	...	...	...	1
No. of Infant Welfare Sessions at Centre	...	...	...	...	...	...	...	...	49
No. of 1st Visits	...	...	...	...	...	...	...	...	344
No. of re-visits	...	...	...	...	...	...	...	...	2822
Total number of visits paid by the Health Visitor	...	...	...	...	...	...	...	...	3166
Number of Mothers in apartments for confinements	...	...	...	...	...	...	...	...	155

The Ward distribution of Infantile Mortality was :—

			North.	South.	East.	West.	Total.
No. of Births	...	...	54	100	137	90	381
No. of Deaths	...	...	1	18	13	10	42
Rate (total)	...	...	18.5	180.	94.8	111.1	110.2

The work of the Health Visitor has been satisfactory, and the reports given by her every month have attracted the attention of the Health Committee. The reports emphasise in an unmistakable manner the urgent need for houses for the working classes, and not so much for those who can well afford to pay an economical rent. There are numerous examples given of Mothers being confined in over-crowded houses, and until houses are obtained for these people, or alternatively a Maternity Home is provided, these unsatisfactory and unhygienic conditions will be perpetuated at a great risk to the coming generation.

The figures given above demonstrate the fact that out of 381 confinements 155 or 40.7 per cent. of these occurred in apartments or an increase during the year of 8.4 per cent. on the figure of 1924, though the number of babies born has diminished.



The following Table shows the age and sex incidence of Infantile Mortality :—

	Weeks.			Mth.	Months.												Total. M. & F.
	0-1	1-2	2-4		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
Whooping Cough	M F	— —	— —	— —	— —	— —	— —	— —	— —	1 —	— —	— —	— —	— —	— —	— —	1
Tuberculosis (Resp.)	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1
Bronchitis	M F	— —	— —	— —	1 —	— —	— —	— —	— —	— —	— —	— —	1 —	— —	— —	— —	5
Pneumonia (all forms)	M F	— —	— —	— —	— 1	— —	— —	— —	— —	— —	2 —	1 —	— —	— —	— —	— —	7
Diarrhoea	M F	1 —	— —	1 —	1 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5
Congenital Debility	M F	11 2	2 —	— 1	13 3	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	17
Other Defined Diseases	M F	— —	— —	1 —	1 —	— —	— —	— —	— —	2 —	— —	— —	— —	— —	— —	— —	6
Total	...	14	2	4	20	4	2	—	1	3	2	2	2	—	3	3	42

It is unfortunate that practically no ante-natal work has been performed at the Centre in spite of every endeavour being made to obtain the attendance of Expectant Mothers and there is undoubtedly room for improvement in this respect during the next few years.

During the year an increase in the work of the Child Welfare Department has been made in the provision of Orthopaedic treatment for children below school age. This treatment has been linked up with the scheme of the County Council and cases that require treatment or examination are transferred to the County Orthopaedic Clinic at the County Health Office. This Clinic works in connection with the Orthopaedic Hospital at Gobowen and any cases requiring admission are admitted to this splendid Institution. Under this scheme two children with marked Rickets were admitted and following treatment one of the children came home with his legs absolutely straight, whereas the other child had also very markedly improved under treatment. These two cases have now left the Borough and live in Garden Village but after-care treatment is still being obtained under the County Health Authority at the County Health Office. Our efforts in affecting this marked improvement in the physical condition of these children have been much appreciated by the parents.

It is satisfactory to report that during the year 1925 no deaths from puerperal sepsis or from other accidents and diseases of pregnancy or parturition occurred, but an increase of six in the number of stillbirths took place but it is also satisfactory to note that whereas in 1924 17 illegitimate births were notified only 5 were notified during last year.

### **Schools.**

No Public Elementary School was closed during the year for notifiable Infectious Disease but five departments were closed owing to an epidemic of Mumps.

## **Laboratory Work.**

Facilities for bacteriological examinations as follows :—

FEVER HOSPITAL LABORATORY.

For examination of throat swabs for Diphtheria.

WELSH NATIONAL MEMORIAL ASSOCIATION.

For examination of Sputa in Tuberculosis cases.

Diphtheria Antitoxin is supplied from the Fever Hospital to Medical Practitioners on demand. When the financial circumstances are such as to make a payment difficult matter no charge is made for the antitoxin.

### **Work done at the Fever Hospital Laboratory, 1925.**

			Positive.	Negative.	Total.
Throat Swabs submitted by Doctors	...	...	28	129	157
„ „ of Contacts	...	...	—	—	—
„ „ of Hospital Patients	...	...	48	89	137
Totals	...	...	<u>76</u>	<u>218</u>	<u>295</u>

The following table shows the rainfall throughout the year. Records taken by Mr. Owain Lewis Jones, Beechley Road, Wrexham, to whom I am greatly indebted.

		Greatest fall in									
		Wet days.		Dry days.	24 hrs.		When recorded.			Total.	
January	...	13	...	18	...	.61	...	2nd	...	...	2.29
February	...	22	...	6	...	.81	...	11th	...	...	4.57
March	...	16	...	15	...	.28	...	1st	...	...	1.13
April	...	16	...	14	...	.38	...	5th	...	...	2.42
May	...	18	...	13	...	.72	...	30th	...	...	4.37
June	...	None	...	30	...	Trace	...	16th, 17th, and 27th			Trace.
July	...	10	...	21	...	1.90	...	23rd.	...	...	3.26
August	...	11	...	20	...	.61	...	23rd	...	...	2.84
September	...	14	...	16	...	.75	...	5th	...	...	3.10
October	...	16	...	15	...	.93	...	20th	...	...	3.73
November	...	14	...	16	...	.93	...	7th	...	...	3.31
December	...	19	...	12	...	.69	...	20th	...	...	3.12
		—		—							
		165		200							34.05

The total fall, namely, 34.05 inches is above the average rainfall for the Borough. In spite of June being a dry month there is an increase on the previous year.

## Sanitary Circumstances of the Area.

### Water.

The water supply of the Borough is provided by the Wrexham and East Denbighshire Water Co., who obtain their water from a mountainous gathering ground on the eastern slopes of the Ruabon mountains, and this supply is augmented by a source from underground in Minera. The water is excellent in character and chemical constitution and taken as a whole is of a very satisfactory bacteriological content. A large amount of work is done by the Company in providing adequate purification of the water by means of extensive storage reservoirs with the addition of downward filtration through sand and also by means of mechanical filtration. In my capacity as Medical Officer of Health to the Wrexham Rural District Council a large amount of work has been done during the last few years and especially in 1925 in dealing with complaints as regards pollution of the water by means of drainage from farms, roads, etc. In samples taken by the Borough and also by the Rural Council as respects its area of supply it was noticed on more than one occasion the presence of excremental organisms in varying amounts in the water. The actual concentration of these organisms depended on circumstances such as the relation of heavy rains or drought to the period at which the samples were taken and in my investigations as regards the Rural District Council in dealing with the pollution a large amount of light was thrown on the difficult problem as to the source of this pollution. A sample of water taken after remedy of the pollution by the affected Authorities was followed by a marked improvement in the bacteriological content of the water but one cannot be too optimistic on the results obtained from one analysis. It has been the policy of the Borough to take two samples per year and the analytical results of the two samples are as follows :—

### March, 1925.

(1) CHEMICAL.			Parts per	Grains.
			100,000	per gallon.
Total solids (dried at 120° C.)	...	...	14.80	10.36
Combined chlorine	...	...	1.10	0.77
equivalent to Na Cl	...	...	1.80	1.27
Nitric Nitrogen	...	...	0.01	0.007
Nitrous Nitrogen	...	...	Nil.	Nil.
Ammoniacal Nitrogen	...	...	0.0007	0.0005
Albumenoid Nitrogen	...	...	0.0042	0.0029
Oxygen absorbed in 4 hours at 27° C.	...	...	0.126	0.088
Lead or Copper	...	...	Nil.	Nil.
Temporary hardness (equivalent to CaCo <sub>3</sub> )	...	...	8.7	6.1
Permanent hardness	...	...	2.2	1.5
Total hardness	...	...	10.9	7.6

## (II) BACTERIOLOGICAL (cultural and microscopical)

Average number of organisms producing visible colonies on gelatine plates, incubated at 20.22° C. for 3 days.....	=	24 per c.c.
Average number of organisms producing visible colonies on agar plates, incubated at 37.5° C. for 2 days .....	=	10 per c.c.
B. Coli .....	not found in 100 c.c.	
Streptococci .....	not found in 30 c.c.	
B. Enteriditis Sporogenes.....	not found in 100 c.c.	

**Remarks.**

"There is no evidence of the presence of excremental organisms in this sample judged by the results.

The water may therefore be regarded as efficiently filtered and quite satisfactory for drinking."

## (I) CHEMICAL.

October, 1925.

	Parts per 100,000	Grains. per gallon.
Total solids (dried at 120° C.) ...	18.50	12.95
Combined chlorine ... ..	1.10	0.77
equivalent to Na Cl ... ..	1.80	1.27
Nitric nitrogen ... ..	0.01	0.007
Nitrous nitrogen... ..	Nil.	Nil.
Ammoniacal nitrogen ... ..	0.0002	0.0001
Albumenoid nitrogen ... ..	0.0024	0.0017
Oxygen absorbed in 4 hours at 27° C ...	0.025	0.018
Lead or Copper ... ..	Nil.	Nil.
Temporary hardness (equivalent to CaCo <sub>3</sub> )	12.0	8.4
Permanent hardness ... ..	1.5	1.1
Total hardness ... ..	13.5	9.5

## (II) BACTERIOLOGICAL (cultural and microscopical)

Average number of organisms producing visible colonies on gelatine plates, incubated at 37.5° C for 2 days .....	=	41 per c.c.
Average number of organisms producing visible colonies on agar plates, incubated at 37.5° C. for 2 days .....	=	25 per c.c.
B. Coli .....	present in 100 c.c.	not in less.
Streptococci .....	not found in 30 c.c.	
B. Enteriditis Sporogenes.....	present in 100 c.c.	not in less.

**Remarks.**

"Although the results of the chemical analysis show considerable improvement on a former sample (9,233, March, 1925) the water cannot be regarded as quite so satisfactory judged on the bacteriological tests of this sample.

In view of this slight discrepancy it may be worth while repeating the latter examination unless there is any reason to suppose the filters are not working quite efficiently."

The supply is constant except when serious shortage occurs following a period of drought and it is satisfactory to note that there are few stand pipes in Wrexham and that practically every house in the Borough has water laid on to the premises. The water is of moderate hardness and contains no lead or any other deleterious metal nor has there been any evidence of lead poisoning in the Borough.



### **Rivers and Streams.**

The river Gwenfro which has a minimum dry flow estimated at 4,500 gallons per hour and a normal usable flow of 24,000 gallons per hour, passes through the Borough of Wrexham as it wends its way from the mountainous heights of Bwlchgwyn to Kings Mills where it joins the river Clywedog where it proceeds through the meadows of Pickhill to the river Dee. The river enters the Borough at Croesnewydd and previous to its entrance to the Borough is subject to pollution by the effluents of coke and steel industries in the region of Southsea. Recent analysis shows that the river purifies itself before entering the Borough and also that a certain amount of pollution occurs in the Borough which makes the river water intermediate in chemical composition between the water obtained at Southsea and the water as it enters the Borough. Certain complaints have been received by the Borough from Parish Councils below the Borough and after a full discussion of the matter the question of pollution was referred to the Wrexham Rural District Council. Within the Borough important industries are located along the banks of the river and one of these, namely, Cobden Flour Mills has repeatedly complained of the state of the river before reaching their premises. This important company has done all in its power to deal with the physical nature of the water by means of weirs and deposition tanks to obtain a water supply fit to be used for their industry, but undoubtedly when these tanks are cleaned out and a similar cleaning out occurs in another important industry close by, pollution of the river does occur. These two companies can only be regarded as secondarily responsible seeing that the river is polluted before it reaches their concerns. Lower down the river there are other industries, such as breweries, foundries, gasworks, and leather works, and a close observation is made of these concerns with reference to any possible pollution. A certain amount of work has been done in relation to tar material entering the river from the gasworks and our suggestions as to remedy have been attended to. There are no other streams in the Borough except the river Gwenfro.

### **Drainage and Sewerage.**

The whole of the Borough with the exception of three privies is connected to sewers which extend from the Borough to the Sewage Outfall Works at Five Fords. There is however an additional emergency sewage system at Hafodywern which is used following heavy rain fall and storms. There is however one additional outlet for storm water to the river above this system. The system at Hafodywern consists of tanks through which the drainage material percolates through a filtering medium and the outlet allows the purified effluents to flow into the river. The system at Five Fords deals with the sewage and includes a screen to remove solid bodies and a large portion of sediment followed by settling tanks following which the effluent is treated by broad irrigation on to a sewage farm of 210 acres. The effluent from this sewage farm after land treatment is allowed to enter the river Clywedog at Five Fords. As to the sufficiency of the arrangements certain discussions, informal in character, have taken place as to the need in the near future of a renewal of the whole drainage system. It is to be remembered that the present drainage system was constructed many years ago when the town had not developed to its present extent and there is evidence that at the present moment the sewers are only barely sufficient for their purpose.

### **Closet accommodation.**

The Borough is in a very satisfactory condition as regards closet accommodation in that there are no hand flushed closets and only one midden privy and two bucket privies. If one excludes these one is fortunate in reporting that the whole of the Borough is connected by means of water closets with cisterns to the sewerage scheme. Consequently there is no work to be done in this direction as the three privies are situated in places which present certain difficulties as regards conversion. It has to be stated that in the Southern area of the town in the neighbourhood of the Barracks there exist a certain number of Ducketts slop water closets and at the present time these are being converted into ordinary closets with water flushing cistern. In any overcrowded locality such as the Borough of Wrexham additional strain is laid on to the water closets by reason of the number of persons using these conveniences and it is not surprising that from time to time certain complaints arise as to blockage and these complaints are at once taken in hand by the Sanitary Inspector.



### Scavenging.

The removal and disposal of house refuse and other forms of scavenging is undertaken by and under the direct supervision of the Borough Surveyor who employs workmen in the employment of the Corporation. Refuse is collected in some places, especially the Council Houses, on a weekly basis but this is not the case in the other parts of the town where occasionally three weeks elapse before the dustmen come round. A large amount of discussion has taken place on this matter in order to obtain an efficient weekly collection for the whole of the Borough and this is especially important in the hot seasons when flies and other biological nuisances exist. In order to obtain more efficient service an additional motor vehicle was purchased but even then though some improvement has been effected, we are still waiting for the weekly collection. Another source of difficulty is the fact that the methods of disposing again require renewing. The present Destructor is taxed to its utmost and is situated in a central position and serves a useful purpose in relation to the baths and also the Electricity Department. The question of the construction of a more modern pattern of destructor and in a more suitable locality is under consideration and the matter is being discussed in relation to a possible co-operation with the Wrexham Rural District Council. It will be noticed in the table supplied under Sanitary Administration that a large amount of work has been done in replacing ashpits by ashbins and also in replacing ashbins which have become damaged or rendered unsuitable.

### Sanitary Inspection of the Area.

Numerical information in respect to Sanitary Administration is given in the following table and it shows the amount of work that has been done by the Sanitary Inspector during the year. The total visits and inspections again show an increase and one is fortunate in having as a Sanitary Inspector, a gentleman who is so efficient in his work as Mr. Stephenson.

## Sanitary Administration.

## INSPECTIONS AND VISITS.

Total number of inspections and visits made	...	...	...	...	...	...	...
<b>Houses.</b>							3637
Housing and Public Health Acts	...	...	...	...	...	...	748
Licensed Houses	...	...	...	...	...	...	104
<b>Infectious Diseases.</b>							
Cases enquired into	...	...	...	...	...	...	94
<b>Slaughter Houses.</b>							
Public Abattoir	...	...	...	...	...	...	1095
Private Slaughter Houses	...	...	...	...	...	...	365
<b>Drainage.</b>							
Defective Drains	...	...	...	...	...	...	74
New Water Closets and Repairs	...	...	...	...	...	...	77
Dairies and Cowsheds	...	...	...	...	...	...	104
Common Lodging Houses	...	...	...	...	...	...	96
Bakehouses	...	...	...	...	...	...	56
Offensive Trades	...	...	...	...	...	...	38
School Premises	...	...	...	...	...	...	4
<b>Nuisances.</b>							
Refuse accumulations	...	...	...	...	...	...	53
Animals	...	...	...	...	...	...	34
Miscellaneous	...	...	...	...	...	...	306
Workshops and Workplaces	...	...	...	...	...	...	74
Informal Notices served	...	...	...	...	...	...	560
Prosecutions	...	...	...	...	...	...	Nil

**Drainage Closets, and Ashpits.**

Number of approved water closets with cisterns (approx.)	...	...	...	...	...	4177
Number of hand flushed closets	...	...	...	...	...	Nil.
Number of Midden Privies	...	...	...	...	...	1
Number with bucket privies	...	...	...	...	...	2
Number with new water closets	...	...	...	...	...	15
Number with repairs to water closets	...	...	...	...	...	52
Number of houses supplied with Ashpit or Ashbin for the first time	...	...	...	...	...	24
Number of Ashpits replaced by ashbins	...	...	...	...	...	74
Number of Ashbins replaced	...	...	...	...	...	187
Number of Drains laid or re-laid	...	...	...	...	...	15
Number cleansed, trapped, ventilated, etc.	...	...	...	...	...	59

**Disinfection and Disinfestation.**

No. of houses disinfected	...	...	...	...	...	90
No. of schools disinfected	...	...	...	...	...	1
No. of articles disinfected at the Fever Hospital	...	...	...	...	...	45
No. of General Infirmary Wards disinfected	...	...	...	...	...	2

**Smoke Abatement.**

In an industrial area such as Wrexham situated as it is in the centre of the North Wales Coalfield the presence of smoke is always with us. Undoubtedly a certain amount of smoke or rather haziness of the atmosphere is produced by smoke which is emitted from colliery areas in the Rural District but there exists in Wrexham a certain number of industries which are the cause of definite pollution of the atmosphere and a great deal of the attention of the Sanitary Inspector as well as of myself, is taken in bringing the attention of these industries to the pollution. The amount of smoke is usually of a temporary nature and is due to the faulty methods of stoking and every endeavour is made to insist that expert firemen are employed and that efficient persons take their place when they are off duty. In addition to the industrial concerns one big offender in this respect is the Corporation Destructor at Willow Road and the attention of the responsible official has frequently been drawn to this matter. Up to the present moment no local readings of atmospheric impurity have been taken but the Health Committee have recently sanctioned the purchase of a deposit gauge which will give monthly information as to the amount of impurity in the atmosphere but it will not be able to give any evidence as to any diurnal variation nor as to the locality from which such impurity arises.

### PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYELAWS OR REGULATIONS.

(a) COMMON LODGING HOUSES. There are five Common Lodging Houses in the Borough and 96 inspections were made periodically at all hours of the day and night. During the year owing to the decease of the owner, one lodging house was removed from the Register. Strict supervision is kept of all the Lodging Houses and taken as a whole they are conducted satisfactorily and have not required any legal action to enforce the regulations or byelaws.

(b) HOUSES LET IN LODGINGS. There are two houses let in lodgings in the Borough namely Broughton Buildings and Chapel Buildings. The buildings are in a very unsatisfactory position and undoubtedly would be demolished in any Improvement Scheme as regards unhealthy areas. Close supervision is made of these buildings.

(c) BAKEHOUSES. There are 28 bakehouses in the Borough. all are periodically inspected by the Inspector and myself and undoubtedly the general conditions of these premises have been much improved during the last few years.

(d) FRIED FISH SHOPS. There are 16 in existence in the Borough. These are inspected periodically and on the whole are conducted in a satisfactory manner.

(e) OFFENSIVE TRADES. Other than the Fish shops included above there are two tripe-dressers and 3 leather dressers, all of which are closely inspected by the Sanitary Inspector.

(f) **UNDERGROUND SLEEPING ROOMS.** In reference to the over-crowding that exists in certain parts of the Borough especially in the Eastern division and especially so in Manley Road, quite a substantial portion of the population live in rooms which as regards the street frontage can be regarded as underground sleeping rooms but not so when one regards the matter from the point of view of the backyard. These are occupied by the poorer classes who are unable to obtain accommodation elsewhere and undoubtedly the position as regards Infectious Disease is not improved by the existence of this type of house. The matter is an economical one and will exist until suitable accommodation is available at a rent that can be paid by these people.

### **Schools.**

The sanitary condition of the water supply of schools is referred to in more detail in the Annual Report of the School Medical Officer. The water supply is obtained from the Wrexham and East Denbighshire Water Co. and is satisfactory in quantity and quality. Taken as a whole the sanitary conditions are satisfactory and are kept under constant supervision. During the year five departments were closed to prevent the spread of Mumps and one adverse circumstance which arose during the year was the closing down, due to a state of disrepair of the boiler at the Victoria Schools, where the children had to be taught without the provision of heating from the hot water pipes during the most critical spell of weather and the temperature in the classrooms during this spell was never above 42 degrees Fahrenheit and was frequently as low as 36. The matter has been discussed in detail in the School Annual Report and all action that can be taken in the interests of the scholars was taken.

## **Housing.**

### **General Housing Conditions.**

In an area such as Wrexham Borough which is admittedly the hub of the North Wales Coalfield as well as being a centre of some importance in the commercial and industrial life in North Wales the housing conditions deserve a detailed consideration. As in any other Borough the types of houses vary with the locality and bear some relation to the economic status of the inhabitants. There are many localities in which the housing conditions are decidedly poor and in these places the houses are small and overcrowded but most of these in the past have been subject to important consideration by the Health Committee especially in relation to the formation of unhealthy areas which would be replaced by the schemes for improvement. As examples one may quote the area in Brook Street, Beastmarket, and Pierces Square, on which something will be said later on. As regards the other parts of the town the conditions are satisfactory except in so far as overcrowding exists and the general type of house is of modern construction. As regards the extent or shortage or excess of houses one can say that there is a definite shortage but it is difficult at the same time to bring any statistical evidence based on the census figures especially when it is seen in the Census return for 1921 that there was a surplus of some thousand rooms to meet the accommodation for the inhabitants of the Borough. This apparent excess has however to be considered in relation to the number of large houses in the better class portions of the Borough and these naturally dilute from a statistical point of view any overcrowding that exists in the other parts. We have however ample evidence as to the incidence of overcrowding, not only from complaints received from various sources but also from the innumerable requests we receive for houses to accommodate various families. A large amount of information however is also obtained not only from the Sanitary Inspector but also by the Health Visitor during her visits in the performance of her duties in relation to Child Welfare. The Health Visitor investigates the accommodation in every case where confinements occur and makes a report which is included in the monthly Health Reports to the Health Committee. As will be mentioned the Health Committee have taken all steps in its power to relieve the shortage of houses by the construction of houses under Council Schemes of which something will be said later on. During the last few years there have been no important changes in the population except as regards the natural increase but owing to the increase in the building developments in the Rural District Council area it is to be expected that families who are now living under overcrowded conditions in the Borough and in lodgings will have emigrated into the Rural District to a certain extent but such condition of affairs is directly correlated with the industrial situation in the surrounding area.



Certain discussions have taken place in reference to the establishment of an important industrial unit just outside the confines of the Borough and though there does not seem to be at present any definite indication of this development we are not without hope that the scheme may even yet eventuate.

As to the cause of overcrowding one can refer to one or two salient factors. In the first place the natural increase in population leading to an increase in the content of each family no doubt has a definite effect in this direction and other subsidiary causes is the fact that certain primiparous mothers return to their parents for confinement and thus lead to an increase, temporary in nature, in the number of inhabitants of the affected houses and one has to be on one's guard to prevent this temporary factor being fixed on a permanent basis. During the last few years, especially in the Northern Districts adjoining the Borough important colliery developments have taken place and these have led to an increase in the number of employees employed. A certain proportion of these have found it impossible to obtain accommodation near the locality of occupation and have found it necessary to take accommodation within the Borough of Wrexham which is central for all parts of the District. This naturally leads to one other factor which may have effect in the near future in causing an increased density of population, namely the developments of transport which radiate through Wrexham in all directions, consequently at the present moment it is very much easier for people to travel from Wrexham outwards than to be obliged to travel tangentially. As regards measures taken or contemplated for dealing with overcrowding one has pleasure in reporting the construction of a large scheme for the provision of Council Houses within the Borough and incidentally outside the Borough in the Rural Area. During the five years ending December, 1925, 156 Council Houses have been built and there are at the termination of this year, 1925, 56 additional houses in the course of erection. One cannot expect any great extension under this scheme as regards land within the Borough boundaries seeing that the land available is limited in extent and it would appear that any substantial development by the Borough in the provision of Council Houses will have to take place within the Rural Area.

As regards the number of cases of overcrowding during 1925 as requested by the Ministry of Health, one need refer to the monthly reports of the Maternity and Child Welfare work from which the following are extracted. For the whole year out of 381 confinements 155 or 40.7 occurred either in over-crowded houses or in apartments or where the mothers had lodgers in the house. A few examples may be of interest though they have previously been reported in the Monthly Reports.

- 13 persons including 9 children living in 2 bedrooms and 2 living rooms.
- 13 persons including 6 adults and 7 children living in 2 bedrooms and 2 living rooms.
- 13 persons including 9 children living in 2 bedrooms and 2 living rooms.
- 11 persons including 7 children living in 2 bedrooms and 2 living rooms.
- 7 persons including 4 adults and 3 children in 1 bedroom and 1 living room.
- 13 persons including 7 adults in 4 bedrooms and 3 living rooms.
- 9 persons including 5 adults in 2 bedrooms and 1 living room.
- 7 persons including 5 lodgers in 2 bedrooms and 2 living rooms.
- 9 persons including 6 lodgers in 2 bedrooms.
- 10 persons of whom 6 are adults and of whom 8 are lodgers in 2 bedrooms and 2 living rooms
- 11 persons of whom 9 are children and of these two are adolescents living in 2 bedrooms and 2 living rooms.

In all of the above mothers had been confined during the year, and it only illustrates one of the dangers to the community as to the effects of overcrowding not only as regards the moral effect on young children but also as to the possibility of septic conditions arising during puerperium. All these cases and others similar in nature are inspected by the Sanitary Inspector and if necessary by myself, and where necessary the matter is reported to the Health Committee for any necessary action but in not a few cases representations made by the Sanitary Inspector is sufficient to alleviate the overcrowding by the transference of the lodgers from the houses.

### **Fitness of Houses.**

With the exception of what can be regarded as slum areas the general standard of houses is satisfactory as regards fitness. The visits of the Sanitary Inspector discover a certain amount of

unfitness due to defects caused by deterioration and in a certain number of cases by acts of waste or neglect by the tenants. The chief defects found consist of defective plaster, general insanitation, such as choked drains and dilapidated ashbins together with a certain amount of damage due to dampness but taken as a whole one is pleased to report that the efforts of the Sanitary Inspector to obtain replacement or reconstruction is met with response on the part of the affected parties and it is very seldom and in very few cases that the attention of the Health Committee has had to be drawn to any lack of co-operation.

#### **General Action taken as regards Unfit Houses.**

Close observation is made to determine the number of unfit houses in the area but it has not been necessary during 1925 to condemn or to demolish any houses, with one exception, where the owner of a certain house in Market Street was asked to appear before the Health Committee to give reasons why the premises should not be demolished. Any action in respect to unfit houses has to be considered in relation to the character and sufficiency of available accommodation elsewhere, and until a sufficient number of suitable houses are in existence there must be a certain laxity in the standards of unfitness. Certain areas already referred to have many years ago been condemned but the property has not been demolished owing to a lack of suitable alternative accommodation for the inhabitants who would be displaced.

One cannot close a discussion on the general fitness of housing without referring to conditions so far as they affect housing as regards water supply, closet accommodation and refuse disposal. The position as regards water supply is in the Borough very satisfactory and needs no discussion. As regards closet accommodation this has been discussed in fuller detail in other parts of the report and one need only refer to correlation between overcrowding and sufficiency of closet accommodation. Undoubtedly any increase in population in certain houses taxes the closet accommodation and thus leads to certain complaints as to choked drains and other conditions due to misuse. The relation of housing to refuse disposal has also been referred to and undoubtedly these conditions cannot be regarded as ideal until we obtain a satisfactory efficient system of weekly collection of house refuse together with the conversion of ashpits to ashbins where such exist. In such a Borough as Wrexham it is surprising to learn that there are 372 ashpits in the Borough, most of these however are in a satisfactory state of construction and under the circumstances one is unable to insist on the necessary conversion to portable ashbins. As has already been stated in previous Annual Reports a certain proportion of these ashpits occur in the larger type of houses and no doubt in this again the voluntary co-operation of the various owners of these houses in effecting the necessary conversions would not only be appreciated by the Health Committee but would materially improve their property in the avoidance of the possibility of nuisances arising from the collections of refuse especially during the hot summer months. At the present moment whenever we attempt to affect voluntary this conversion the argument is thrown against us that there is no efficient weekly collection of refuse.

#### **Unhealthy Areas.**

No complaints have been received or representations made during the last few years in respect to unhealthy areas but at a period when the housing conditions were not so acute as they have been during the last few years, a large amount of work was performed in reporting as regards unhealthy areas in the Borough and it would appear that now the housing conditions are materially improved the question of the unhealthy area should be re-opened.

Areas under consideration are :—

- (1) Broughton Buildings which should be demolished.
- (2) Brook Square property where a large proportion of the population exist under insanitary conditions.
- (3) Pierce's Square, where there exists the most typical example of back to back houses in the Borough.
- (4) Several courts in various parts of the Town.

#### **Byelaws.**

One of the most urgent problems to be undertaken by the Health Committee and the Borough Council is a complete modern revision of the Byelaws as far as they affect the Health Department.



The Byelaws in existence are antiquated and though the necessity for revision has been referred to by my predecessor and myself no action has been taken. As regards the existing byelaws, all that can be done is done and undoubtedly the powers of the Sanitary Inspector would be strengthened were revision of the existing byelaws and the addition of new byelaws discussed and decided upon. One need for example refer to the necessity for byelaws in dealing with pigeons, chickens, rag and bone merchants and offensive trades and one must not forget the need for increased supervision necessitating byelaws in dealing with Marine Stores as well as houses let in lodgings.

## Housing Statistics for the year 1925.

**Number of new houses erected during the year :—**

[illegible]

**Unfit dwelling houses :—**

INSPECTION :—

(1)	Total number of dwelling houses inspected for housing defects (under the Public Health or Housing Acts) ... ..	1149
(2)	Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910 ... ..	401
(3)	Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	1
(4)	Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	213

### **Remedy of Defects without service of formal notice :—**

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their Officers	...	...	...	...	609
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### Action under Statutory Powers :—

A.—Proceedings under section 28 of the Housing, Town Planning, &c., Act, 1919

(1)	Number of dwelling houses in respect of which notices were served requiring repairs ... ..	3
(2)	Number of dwelling houses which were rendered fit :—	
(a)	By owners ... ..	3
(b)	By Local Authority in default of owners ... ..	—
(3)	Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ... ..	1

### B.—Proceedings under Public Health Acts.

(1)	Number of dwelling houses in respect of which notices were served requiring defects to be remedied	...	...	...	...	...	...	...	347
(2)	Number of dwelling houses in which defects were remedied—								
(a)	By owners	...	...	...	...	...	...	...	308
(b)	By Local Authority in default of owners	...	...	...	...	...	...	...	Nil

C.—Proceedings under sections 17 and 18 of the Housing Town Planning &c., Act, 1919.

(1)	Number of representations made with a view to the making of Closing Orders...	1
(2)	Number of dwelling houses in respect of which Closing Orders were made ...	1
(3)	Number of dwelling houses in respect of which Closing Orders were determined— the dwelling houses having been rendered fit ... .. Nil.	
(4)	Number of dwelling houses in respect of which Demolition Orders were made ...	1
(5)	Number of dwelling houses demolished in pursuance of Demolition Orders ...	Nil.

## Inspection and Supervision of Food.

### **Milk Supply.**

As was reported in my Annual Report for last year the milk retailed in the Borough of Wrexham presents satisfactory standards, which is, if anything, superior to that supplied to any other part of the County. The general arrangements for the supply and distribution of pure and wholesome milk can be regarded as adequate. At the beginning of the year there were 52 names on the Register of Retailers within the Borough, six of these however discontinued selling milk and there remained on the register at the end of the year 46 Retailers. During the year 1925 one retailer was summoned to appear before the Committee to answer a charge under section 2 of the Milk and Dairies Regulations 1922 to give reason why his name should not be removed from the Register but it is satisfactory to note that following this interview substantial improvement has taken place in the methods of cleanliness and general supervision of this Retailer is regularly carried out. In the question of milk supply one is referred to the habit of certain retailers smoking cigarettes during the delivery of milk and even when the milk churns are opened. The attention of certain of them has been drawn to this irregularity and has resulted in a certain amount of improvement in this respect. Another cause of irregularity was the presence of animals such as dogs in the milk float while the retailer was distributing milk.

It is to be regretted that there are no licences within the Borough for the supply and sale of special designated milk nor is there in existence any apparatus licensed for pasteurisation. The producers in and near Wrexham are proverbially conservative and do not take kindly to any of the modern scientific methods in vogue in other parts of the Country. We have however, lately had one enquiry in reference to the provision of "Grade A" milk and the matter is still under consideration. In this connection it is satisfactory to report that the Sanitary Inspector attended a course of instruction on the modern methods of milk supply and the information that he received is valuable and is used to the fullest extent when occasion demands.

### **Meat.**

Meat inspection is carried out in a thorough manner by the Meat Inspector, Mr. Stephenson, who has had extensive experience in this specialised branch of Public Health. We are fortunate in the Borough as regards the number of slaughter houses, there being one public Abattoir and one private slaughter house, which is not used to any great extent. Consequently it is not a difficult matter to keep both these places under supervision. The Public Abattoir serves a useful purpose and is utilised by 18 butchers and every carcase, before removal for human consumption, is inspected by Mr. Stephenson, and the meat which is passed is marked by the same Official under the Public Health (Meat) Regulations 1924. It is interesting to note that the Borough is the only locality in North Wales where meat marking takes place, and it is interesting to note that the butchers who utilised the facilities offered by the Corporation appreciate the system in vogue, especially when it ensures a satisfactory supply of meat to the customers who naturally have more confidence in their butchers. As regards diseased meat a careful supervision is made to detect any signs of abnormality and a report is made monthly to the Health Committee in reference to what has taken place in the previous month and care is taken that the arrangements for the disposal of condemned meat are carried out in a satisfactory manner. In addition to the work that is being done in the slaughter-houses strict supervision as regards administration of the Public Health (Meat) Regulations is carried out as regards stalls, shops and vehicles and this is especially important in such localities as the Butchers' Market where so much meat is retailed following slaughter in slaughter-houses outside the Borough where the conditions are different from what they are in the Borough and have been the subject of a great deal of discussion in Public Health circles during the last two years.

### **Other Foods.**

The Sanitary Inspector visits the shops in the course of his duties with a view to discovering unsound food and it is satisfactory to note that his visits are welcomed by the retailers who co-operate in every manner with him. Taken as a whole there does not appear to be an excessive amount of unsound food sold or exposed for sale in the Borough. In reference to the sanitary condition of Bakehouses and other premises where foods are manufactured, prepared, stored or

exposed for sale a large amount of work has been done during the last few years and the sanitary condition of bakehouses has been improved and where necessary any alterations have been insisted upon, such as the disuse of a certain underground room for the preparation of food. The existing powers seem to be adequate for dealing with such matters, except possibly in reference to the question of washing accommodation in the various premises. As regards cases of food poisoning there have been none during the last five years.

The following table gives the number of animals slaughtered at the Public Abattoir according to months, viz :—

ANIMALS SLAUGHTERED.						
MONTHS.	Cattle.	Calves.	Sheep.	Pigs.	Total.	
January ...	29	4	179	499	711	
February ...	35	23	166	551	775	
March ...	45	34	212	641	932	
April ...	23	29	161	570	803	
May ...	27	49	247	572	995	
June ...	20	1	337	460	818	
July ...	21	1	355	548	925	
August ...	17	1	310	477	805	
September ...	36	1	288	644	969	
October ...	29	1	286	594	910	
November ...	28	1	260	638	927	
December ...	23	—	190	615	828	
	<u>333</u>	<u>145</u>	<u>2991</u>	<u>6809</u>	<u>10278</u>	

The increase in the number of animals slaughtered at the Public Abattoir is a matter on which the Health Department can be congratulated and it would seem to indicate that arrangements at present existing at the Abattoir are receiving recognition by the Meat Traders.

#### Meat condemned at the Public Abattoir during the year.

2 Heifers and Offal .....	Tuberculosis.
2 Cows and Offal .....	do.
2 Forequarters of Beef .....	do.
3 Sheep .....	Fevered Flesh and Pleurisy.
2 Pigs and Offal .....	Tuberculosis.
2 Pigs and Offal .....	Fevered Flesh.
5 Calves .....	Immature.
30 Pigs Heads .....	Tuberculosis.
30 Pigs Plucks .....	do.
2 Cows Livers .....	do.
7 Cows Livers .....	Abscesses.
3 Cows Livers .....	Echinococcus Veterinorum.
13 Cows Livers .....	Cirrhosis.
3 Cows Lungs .....	Abscesses.
2 Cows Heads .....	Actinomycosis.
8 Cows Lungs .....	Tuberculosis.
1 Beasts Kidney .....	Abscess.
75 Sheeps Lungs .....	Pseudo Tuberculosis.
77 Sheeps Livers .....	Flukes.

#### Other Foodstuffs condemned during the year.

161 lbs. Chilled Beef .....	Decomposition.
28 lbs. Kippers .....	do.
25 lbs. Corned Beef .....	do.
2 boxes of Mackerel. ....	do.
6 lbs. Tongue .....	do.
20 Crates of Cauliflowers .....	do.



### Sale of Food and Drugs Act.

I am indebted to Mr. Clarke Jones, Inspector of Weights and Measures, for the following particulars of work done under the Food and Drugs Acts :—

The appended table shows the number and composition of the samples taken, with the result of the analysis.

Samples Taken.						
Article.	Number Taken				Result of Analysis.	Remarks.
New Milk ... ..	...	...	...	35	31 genuine, 4 deficient in cream, (ranging from 4 per cent to 11 per cent. 2 above standard	...Explanation demanded, and Vendors cautioned.
Milk taken direct from cows	...	...	...	2	Genuine	
Condensed Milk ... ..	...	...	...	3	Genuine	
Dried Milk ... ..	...	...	...	1	do.	
Cream ... ..	...	...	...	2	do.	
Preserved Cream ... ..	...	...	...	1	do.	
Butter ... ..	...	...	...	9	do.	...Two contained Boric acid.
Cheese ... ..	...	...	...	1	do.	
Lard ... ..	...	...	...	2	do.	
Flour ... ..	...	...	...	1	do.	
Jam ... ..	...	...	...	5	do.	
Rice ... ..	...	...	...	1	do.	...Contained 26.6 grain of Steatite per lb.
Coffee ... ..	...	...	...	1	do.	
Bottled Fruit ... ..	...	...	...	1	do.	
Tinned Fish ... ..	...	...	...	2	do.	...One contained 0.4 grains of tin per lb.
Vinegar ... ..	...	...	...	1	do.	
Lime Juice Cordial ... ..	...	...	...	1	do.	
Spirits ... ..	...	...	...	3	do.	
Honey ... ..	...	...	...	1	do.	
Syrup ... ..	...	...	...	1	do.	
Demerara Sugar ... ..	...	...	...	1	do.	
Ground Almonds ... ..	...	...	...	1	do.	
Gravy Salt ... ..	...	...	...	1	do.	
Total				77		

### Factories, Workshops, and Workplaces.

The following table gives the number of visits paid by the Sanitary Inspector in reference to the above.

Premises.	Number of Inspections.	Written Notices.	Occupiers prosecuted.
Factories (including Factory Laundry) ... ..	8	3	—
Workshops (including Workshop Laundries) ... ..	74	18	—
Workplaces (other than Outworkers' Premises) ... ..	—	—	—
Total	82	21	—



**Defects found in Factories, Workshops and Workplaces.**

Particulars.	Number of Defects.			Number of offences in respect to which Prosecutions were instituted.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts :—				
Want of cleanliness ... ..	13	13	—	—
Want of ventilation ... ..	1	1	—	—
Overcrowding ... ..	—	—	—	—
Want of drainage of floor ... ..	—	—	—	—
Other nuisances ... ..	1	1	—	—
Sanitary accommodation insufficient ... ..	2	2	—	—
unsuitable or defective ... ..	—	—	—	—
not separate for sexes ... ..	1	1	—	—
Offences under the Factory and Workshops Acts :—				
Illegal occupation of underground bakehouses (s.101) ... ..	—	—	—	—
Other Offences (excluding offences relating to out work and offences under sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) order 1921 ... ..	—	—	—	—
Total ... ..	18	18	—	—

**Outwork in Unwholesome Premises, Section 108.**

Nature of Work.	Instances.	Notices served.	Prosecutions.
WEARING APPAREL :—			
Making, etc. ... ..	—	—	—
Cleaning and washing ... ..	—	—	—
Household Linen ... ..	—	—	—
Lace, curtains, and nets ... ..	—	—	—
Curtains and furniture hangings ... ..	—	—	—
Furniture and upholstery ... ..	—	—	—
Electro-plate ... ..	—	—	—
File making ... ..	—	—	—
Brass and brass articles ... ..	—	—	—
Fur pulling ... ..	—	—	—
Cables and chains ... ..	—	—	—
Anchors and grapnels ... ..	—	—	—
Cart gear ... ..	—	—	—
Locks, latches, and keys ... ..	—	—	—
Umbrellas, etc. ... ..	—	—	—
Artificial flowers ... ..	—	—	—
Nets, other than wire nets ... ..	—	—	—
Tents ... ..	—	—	—
Sacks ... ..	—	—	—
Racquet and tennis balls ... ..	—	—	—
Paper, etc., boxes, paper bags ... ..	—	—	—
Brush making ... ..	—	—	—
Pea picking ... ..	—	—	—
Feather sorting ... ..	—	—	—
Carding etc. of buttons, etc. ... ..	—	—	—
Stuffed toys ... ..	—	—	—
Basket Making ... ..	—	—	—
Chocolates and sweetmeats ... ..	—	—	—
Cosaques, Christmas crackers, Christmas stockings, etc....	—	—	—
Textile weaving ... ..	—	—	—
Total ... ..	—	—	—

**Date of Operation.**

Public Health Acts Amendment Act, 1890, Part III.	...	...	January 1st, 1891
Public Health Acts Amendment Act, 1890, Part V.	...	...	February 1st, 1898
Infectious Diseases Prevention Act, 1890	...	...	March 1st, 1891
Infectious Diseases Notification Act, 1889	...	...	January 1st, 1890
Public Health Acts Amendment Act, 1907, Parts II., III., IV., V. and VI. and Sections 93 and 95 comprised in Part X.	...	...	July 31st, 1911
Rats and Mice (Destruction) Act, 1919.			
Housing, Town Planning &c. Acts, 1923 and 1925.			
Public Health Act, 1925.			
Housing of the Working Classes Act, 1890, Part III.	...	...	May 3rd, 1897
Notification of Births Act, 1907	...	...	May 3rd, 1897

Public Health (Meat) Regulations, 1925.  
Public Health (Tuberculosis) Regulations, 1924.

Charter for Incorporation of Borough	...	...	...	...	...	23rd Sept., 1857
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Order in Council vesting in the Corporation powers for providing requisite places of burial for the inhabitants of the Borough and Parish of Wrexham. 9th Sept., 1865.

Order of Local Government Board confirming Order made by Corporation declaring the following trades (in addition to those enumerated in Section 112 of the Public Health Act 1875), to be offensive trades, namely:—Blood-drier, Tanner, Leather-dresser, Fat Melter or Fat Extractor, Glue Maker, Size Maker, Gut Scraper, and Fish Fryer. 1st Dec., 1911.

The County of Denbigh (Prevention and Treatment of Small-Pox) Regulations, 1924.  
11th June, 1924.

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# INDEX.

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	PAGES
Animals Slaughtered at Public Abattoir ... ..	27
Ambulance Facilities ... ..	12
Analysis of Water ... ..	17 & 18
Antenatal ... ..	16
Anthrax ... ..	9
Ashpits ... ..	21 & 24
Births ... ..	4
Birth Rate ... ..	4
Bakehouses ... ..	21
Byelaws ... ..	24
Cancer ... ..	6 & 10
Causes of Death ... ..	6
Cerebral Heamorrhage ... ..	6
Common Lodging Houses ... ..	21
Clinics and Treatment Centres ... ..	11
Closet Accommodation ... ..	19 & 24
Deaths ... ..	5
Death Rate ... ..	5
Diphtheria ... ..	8
Dick Tests ... ..	9
Disinfection and Disinfestation ... ..	21
Dairies, Cowsheds and Milkshops ... ..	26
Drainage System ... ..	19
Enteric Fever ... ..	10
Fever Hospital	
(1) Admissions and Discharges ... ..	12
(2) Laboratory Work ... ..	12
Free Milk, cases supplied ... ..	13
Fried Fish Shops ... ..	21
Foods ... ..	26
General Statistics ... ..	4
Heart Disease ... ..	6
Hospital Accommodation ... ..	11
Houses let in lodgings ... ..	21
Housing ... ..	22
Institutions ... ..	12
Infantile Mortality Rate ... ..	5 & 7
Maternity and Child Welfare ... ..	4, 11, 12 & 14
Meat ... ..	26
Meat Marking ... ..	26
Meat Regulations, Public Health ... ..	26
Milk Supply ... ..	26 & 28
Midwives ... ..	11
Natural and Social Conditions of the Area ... ..	3
Notifiable Diseases ... ..	7
Number of Mothers Attending Centre ... ..	12
„ Babies Registered with M.O.H. ... ..	14
„ Inspections and Visits of Sanitary Inspector ... ..	20
„ New Houses Erected ... ..	25
Ophthalmia Neonatorum ... ..	8

	PAGES
Overcrowding ... ..	3, 4, 14, 22 & 23
Orthopaedic Treatment ... ..	16
Offensive Trades ... ..	21 & 25
Preface ... ..	1
Population, Density of ... ..	4, 22 & 23
Puerperal Sepsis ... ..	6, 16 & 23
Pneumonia ... ..	9
Professional Nursing ... ..	11
Rabies ... ..	9
Rainfall ... ..	17
Refuse Removal ... ..	20
Rivers Pollution ... ..	19
Remedy of Housing Defects ... ..	25
Staff of Health Department ... ..	2 & 12
Scarlet Fever ... ..	8
Schick Tests ... ..	8
Smallpox ... ..	9
Sanitary Administration ... ..	20
Smoke Abatement ... ..	21
Slaughterhouses... ..	26 & 27
Schools, Sanitation of ... ..	22
„ Closed ... ..	16
„ Clinics ... ..	11
Sewage Farms ... ..	19
Summary of Nursing Arrangements ... ..	11
Sale of Food and Drugs Act ... ..	28
Tuberculosis ... ..	6, 7, 9, & 11
Underground Sleeping Rooms ... ..	22
Unhealthy Areas ... ..	22 & 24
Unfit Dwelling Houses ... ..	25
Vaccination Returns ... ..	10
Veneral Diseases ... ..	11
Verminous Persons ... ..	10
Vital Statistics ... ..	4
Water Supply ... ..	17
TABLES	
Adoptive Acts and Regulations ... ..	30
Animals Slaughtered ... ..	27
Causes of Death (age and sex incidence) ... ..	6
Chemical Analysis ... ..	17 & 18
Death Rates ... ..	5
Factories, Workshops and Workplaces ... ..	28
Housing Statistics ... ..	25
Infantile Mortality Rate ... ..	5, 14 & 15
Maternity and Child Welfare ... ..	12 & 14
Meat and Foodstuffs Condemned ... ..	27
Notifiable Diseases ... ..	7 & 10
Ophthalmia Neonatorum ... ..	8
Rainfall ... ..	17
Sanitary Administration ... ..	20 & 21
Sale of Food and Drugs Act ... ..	28
Tuberculosis ... ..	7
Vaccination ... ..	10





